IN THE CLAIMS

1. (Currently Amended) A plasma surgical device for reducing bleeding in living tissue by means of a gas plasma, comprising a plasma-generating system having an anode ~~(1)~~ , a cathode ~~(8)~~ and a gas supply channel ~~(17)~~ for supplying gas to the plasma-generating system, the plasma-generating system comprising at least one electrode ~~(3, 5)~~, which is arranged between said cathode ~~(8)~~ and said anode ~~(1)~~, and the plasma-generating system being enclosed by a housing ~~(12)~~ of an electrically conductive material, which is connected to the anode ~~(1)~~, ~~characterised in that~~ wherein said housing ~~(12)~~ forms said gas supply channel ~~(17)~~ .

2. (Currently Amended) A plasma surgical device according to claim 1, in which said housing ~~(12)~~, in addition to said gas supply channel ~~(17)~~, forms at least one additional channel ~~(15, 16)~~.

3. (Currently Amended) A plasma surgical device according to claim 2, in which said housing ~~(12)~~, in addition to said gas supply channel ~~(17)~~, forms at least two additional channels ~~(15, 16)~~.

4. (Currently Amended) A plasma surgical device according to claim 3, in which said gas supply channel ~~(17)~~ is arranged at the centre of the housing ~~(12)~~ and the additional channels ~~(15, 16)~~ are arranged along the circumference of the gas supply channel ~~(17)~~.

5. (Currently Amended) A plasma surgical device according to ~~claim 3 or 4~~ claim 3, in which said additional channels ~~(15, 16)~~ are cooling channels for supplying and discharging a coolant.

6. (Currently Amended) A plasma surgical device according to ~~any one of the preceding claims~~ claim 1, in which the housing ~~(12)~~ forms a supply portion, in which said gas

supply channel ~~(17)~~ is formed, and a plasma-generating portion, in which said plasma-generating system is provided.

7. (Currently Amended) A plasma surgical device according to ~~any one of the preceding claims~~ claim 1, in which said cathode ~~(8)~~ is connected to a conductor ~~(11)~~ for connection to a voltage source.

8. (Currently Amended) A plasma surgical device according to claim 7, in which said conductor ~~(11)~~ is adapted to extend through one of the channels ~~(15, 16, 17)~~ in said housing ~~(12)~~.

9. (Currently Amended) A plasma surgical device according to claim 8, in which the conductor ~~(11)~~ extends through a gas supply channel ~~(17)~~ arranged at the centre of said housing ~~(12)~~.

10. (Currently Amended) A plasma surgical device according to ~~any one of the preceding claims~~ claim 1, in which said plasma-generating system comprises at least two electrodes ~~(3, 5)~~ , which are insulated from each other by an insulator ~~(4)~~.

11. (Currently Amended) A plasma surgical device according to ~~any one of the preceding claims~~ claim 1, in which said at least one electrode ~~(3, 5)~~ is mounted in a holding means ~~(7)~~ made of an electrically insulating material.

12. (Currently Amended) A plasma surgical device according to claim 11, in which said electrodes ~~(3, 5)~~, and an insulator ~~(4)~~ if any, are press fitted to said holding means ~~(7)~~.

13. (Currently Amended) A plasma surgical device according to ~~claim 11 or 12~~ claim 11 , in which said cathode ~~(8)~~ is arranged in the holding means ~~(7)~~ concentrically with and spaced from an electrode ~~(5)~~ closest to the cathode ~~(8)~~.

14. (Currently Amended) A plasma surgical device according to claim 13, in which said cathode ~~(8)~~ is mounted in the holding means ~~(7)~~ by means of a cathode holder ~~(9)~~, which is press fitted to the holding means ~~(7)~~.

15. (Currently Amended) A plasma surgical device according to ~~claim 13 or 14~~ claim 13, in which an insulating tube ~~(6)~~ of a ceramic material is mounted on the inside of the holding means ~~(7)~~ so as to enclose the cathode ~~(8)~~.

16. (Currently Amended) A plasma surgical device according to ~~any one of claims 13-15~~ claim 13, in which the holding means ~~(7)~~ has a connection end, which is connected to said gas supply channel ~~(17)~~, so that gas is passed through the holding means ~~(7)~~ to the cathode ~~(8)~~ and then through said at least one electrode ~~(3, 5)~~ towards the anode ~~(1)~~.

17. (Currently Amended) A plasma surgical device according to claim 16, in which the holding means ~~(7)~~ has an outer shape such as to allow a fluid to flow respectively from and to the additional channels ~~(15, 16)~~ in a space formed between the holding means ~~(7)~~ with said electrode ~~(5, 3)~~, and insulators ~~(4)~~ if any, and the inner wall of the housing ~~(12)~~ at the holding means ~~(7)~~.

18. (Currently Amended) A plasma surgical device according to ~~any one of the preceding claims~~ claim 1, in which a gasket ~~(2)~~ is arranged between the anode ~~(1)~~ and the electrode ~~(3)~~ closest to the anode ~~(1)~~, and the plasma-generating system is arranged in such manner in the housing ~~(12)~~ that the anode ~~(1)~~ is connected to the housing ~~(12)~~, a predetermined compressive force being applied to the gasket ~~(2)~~, so that a watertight seal is established between the housing ~~(12)~~ and the anode ~~(1)~~ and electrical contact therebetween is ensured.

19. (Currently Amended) A plasma surgical device according to ~~any one of he preceding claims~~ claim 1, in which said housing ~~(12)~~ is surrounded by a first contact ring ~~(27)~~ in electrical contact therewith, which contact ring is connected to earth.

20. (Currently Amended) A plasma surgical device according to claim 19, in which said housing ~~(12)~~ is surrounded by a second contact ring ~~(24)~~, which is capable of being used to constantly control the earthing of the housing ~~(12)~~.

21. (Currently Amended) A plasma surgical device according to ~~any one of claims 2-19~~ claim 2, in which a connecting device is provided for connecting the gas supply to said gas supply channel ~~(17)~~ and any desired function to said additional channels ~~(15,16)~~.

22. (Currently Amended) A plasma surgical device according to claim 21, in which said connecting device has an outlet end, which defines connecting channels for obtaining a fluidtight fit in said gas supply channel ~~(17)~~ and additional channels ~~(15, 16)~~, and an inlet end provided with hose couplings ~~(18, 19, 20)~~ for connecting hoses to each of said connecting channels.

23. (Currently Amended) A plasma surgical device according to ~~claim 21 or 22~~ claim 21, in which said connecting device also has a conductor opening through which a cathode conductor ~~(11)~~ extends for connection to a voltage source.

24. (Currently Amended) A plasma surgical device according to ~~any one of claims 2-23~~ claim 2, in which said housing ~~(12)~~ is connected to hoses for supplying gas and any desired function to the additional channels, which hoses are connected, at their other end, to a connector for connection to a supply unit.

25. (Currently Amended) A plasma surgical device according to ~~any one of the preceding claims~~ claim 1, which comprises a handle portion that at least partially encloses said housing ~~(12)~~ to allow easy handling of the device.

26. (Currently Amended) A plasma surgical device according to claim 20, which comprises a circuit adapted to distinguish the device type by means of the

resistance of an indication component ~~(25)~~.

27. (Currently Amended) A plasma surgical device according to ~~any one of the preceding claims~~ claim 1, which has a first button ~~(26)~~ for switching the plasma generator on and off.

28. (Currently Amended) A plasma surgical device according to claim 27, which, for increased reliability, has a second button ~~(26)~~.